

COUNCIL COMMUNICATION

AGENDA TITLE:

Specifications and Advertisement for Bids for

High Pressure Sodium Luminaires

MEETING DATE:

May 5, 1993

PREPARED BY:

Electric Utility Director

RECOMMENDED ACTION:

That the City Council approve the specifications and authorize advertisement for bids for the purchase of 85 250-watt high pressure sodium luminaires for installation in the downtown area.

BACKGROUND INFORMATION:

Electric Utility Department has issued The a work order to replace 85 mercury vapor lights in the downtown area with the more efficient high pressure sodium luminaires.

The area in which the conversions are scheduled to take place is bounded by Lockeford Street, Church Street, Lodi Avenue and Sacramento Street.

The high pressure sodium luminaires will improve lighting levels in the area while reducing power consumption by 32%.

FUNDING:

Estimated Cost: \$8,000

Budget Account: Street Light Maintenance

BID OPENING:

May 19, 1993

Henry J. Rice. Electric Utility Director

Prepared by Joel Harris, Purchasing Officer

APPROVED: - Thos.

THOMAS A PETERSON

City Manager

EQUIPMENT SPECIFICATIONS

LUMINAIRES

GENERAL

Luminaires shall be furnished, without lamps or photoelectric control units, in compliance with these specifications. Equipment furnished shall meet the latest revisions of the ANSI Standards.

LUMINAIRES

- A. <u>Ballasts</u>: Ballasts shall be of the regulated type and shall be integral with the luminaires. Ballasts shall have a minimum power factor of 90%; inrush current shall be less than operating current, shall operate at plus or minus 10% rated voltage. Voltage and wattage shall be as specified on proposal form(s). Ballasts shall be of the type recommended for high pressure sodium lamps.
- B. <u>Light Distribution:</u> Luminaires shall have the following Illuminating Engineering Society (IES) light distribution patterns:
 - Medium
 - Type III
 - . Semi-Cutoff
- C. <u>Reflector</u>: Reflector shall be removable and highly specular.
- D. <u>Refractor:</u> Acrylic refractor shall be supplied for 100-watt and glass refractor shall be supplied for 250-watt luminaires. Refractor latch shall be vibration proof to prevent accidental opening of the door. Gaskets shall be used to seal the optical assembly at socket entry and between reflector and refractor.
- E. <u>Slipfitter:</u> Slipfitter shall accommodate luminaire arms ranging from 1-5/8" O.D. through 2-3/8" O.D. without rearranging of mounting parts and be adjustable plus or minus 5 degrees from horizontal. In addition the slipfitter shall accept mounting arms with minimum insert length of 4". The distance between the end of the luminaire arm when fully seated in the slipfitter and any component of the luminaire ie. ballast, terminal block, starter board etc. shall be a minimum of 1-1/2". The slipfitter bracket shall be single-piece design.

F. Housing: Outer housing shall be cast aluminum, similar in design to American Electric series 113 or General Electric series M2RR and shall be equipped with twist-lock type photoelectric control receptacle. The receptacle shall be adjustable to permit reorientation of the photoelectric control unit.

The luminaire terminal block shall be mounted on the inside side-wall of the housing at a location readily permitting termination of supply conductors entering the luminaire through the luminaire arm ie. minimum bending of supply conductors.